

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Nobuyuki NONAKA

Application No.: 10/697,237

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For: GAMING MACHINE

Attorney Docket No.: SHO-0045

Group Art Unit: 3714

Examiner: R. E. Mosser

Confirmation No.: 9024

#### **APPEAL BRIEF**

#### **MS APPEAL BRIEF - PATENTS**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Under 37 C.F.R. §41.37, this Appeal Brief is in furtherance of the Notice of Appeal, filed in the above-identified application concurrently herewith, and appeals the final decision of the Examiner in the final Office Action dated May 24, 2010.

The fees required under § 41.20 and any required petition for extension of time for filing this brief and fees therefor, are provided in the accompanying Transmittal of Appeal Brief. Should additional fees be necessary in connection with the filing of this paper or if a Petition for Extension of Time is required for timely acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No. 18-0013 for any such fees and Applicant(s) hereby petition for such extension of time.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37:

I. Real Party In Interest

II Related Appeals and Interferences

III. Status of Claims

IV. Status of Amendments

V. Summary of Claimed Subject Matter

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VI. Grounds of Rejection to be Reviewed on Appeal

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XI. Conclusion

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Related Proceedings Appendix

#### I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Aruze Corp. of Tokyo, Japan ("Aruze") is the real party in interest of the present application. An assignment of all rights in the present invention to Aruze was executed by the inventors and recorded by the United States Patent and Trademark Office on reel 015532, frame 0674.

#### II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

#### III. STATUS OF CLAIMS

Claims 1 - 7 Canceled

Claims 8 and 9 Rejected, now being appealed

Claim 10 Canceled

Claims 11 - 13 Rejected, now being appealed

Claim 14 Canceled

Claims 15 and 16 Rejected, now being appealed

Claim 17

Canceled

Claim 18

Rejected, now being appealed

#### IV. STATUS OF AMENDMENTS

There are no amendments after the final Office Action dated May 24, 2010. Accordingly, claims 8, 9, 11-13, 15, 16 and 18 as recited in the Claims Appendix are now under appeal.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 8 is directed to a gaming machine 1 (page 22, line 21, et. seq; Fig. 1) that includes a display device 2a-2c (page 22, line 20, et. seq.), a liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1), a liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) and a controller 140 (page 30, line 16, et. seq.; Fig. 10). The display device 2a-2c (page 22, line 20, et. seq.) has a plurality of symbols (page 10, line 4, et. seq.) arranged thereon. The liquid crystal display device (page 145, lines 12-13) is disposed in front of the display device 2a-2c (page 22, line 20, et. seq.) and includes a transparent display region (page 7, lines 11-12, et. seq.) for transparently displaying the symbols (page 10, line 4, et. seg.) arranged on the display device 2a-2c (page 22, line 20, et. seq.). The liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) is disposed between the display device 2a-2c (page 22, line 20, et. seq.) and the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) and includes a display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6). The display shielding unit 113a-113c (page 7, line 14, et. seg.; Fig. 6) is provided at a position corresponding to the transparent display region (page 7, lines 11-12, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) and the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) is controlled to enter a shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6) under a predetermined condition so as to shield display of the symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.) and transparently displayed on the

transparent display region (page 7, lines 11-12, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1). The controller 140 (page 30, line 16, et. seq.; Fig. 10) is configured to:

- (a) determine the plurality of symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.);
- (b) control the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) of the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) to enter the shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6) so as to prevent the transparent display region (page 7, lines 11-12, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) from transparently displaying the plurality of symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.), in a case where arrangement of a predetermined symbol combination (page 8, lines 19-20, et. seq.) on the display device 2a-2c (page 22, line 20, et. seq.) is determined as a result of the process (a);
- (c) arrange the symbols (page 10, line 4, et. seq.) determined in the process (a) on the display device 2a-2c (page 22, line 20, et. seq.); and
- (d) display a specific image (page 30, line 22, et. seq.) on a display region (page 66, ines 23-24, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) including the transparent display region (page 7, lines 11-12, et. seq.) in which the display of symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.) in the process (c) is shielded by the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) in the shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6) under the control in the process (b).

Further, the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) is made up of a normally white liquid crystal panel (page 45, line 11) for maintaining a transparent state (23a-23c) (page 10, lines 1-2, et. seq.; Fig. 4) with a voltage not being applied (page 45, lines 12-13) and the controller 140 (page 30, line 16, et. seq.; Fig. 10) controls the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) of the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) so as to change over from the transparent state (23a-23c)

(page 10, lines 1-2, et. seq.; Fig. 4) to the shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6), by applying the voltage (page 45, lines 2-3) when process (b) is performed.

Claim 11 is directed to a gaming machine 1 (page 22, line 21, et. seq; Fig. 1) that includes a display device 2a-2c (page 22, line 20, et. seq.), a liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1), a liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) and a controller 140 (page 30, line 16, et. seq.; Fig. 10). The display device 2a-2c (page 22, line 20, et. seq.) has a plurality of symbols (page 10, line 4, et. seq.) arranged thereon. The liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) is disposed in front of the display device 2a-2c (page 22, line 20, et. seq.) and includes a transparent display region (page 7, lines 11-12, et. seq.) for transparently displaying the symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.). The liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) is disposed between the display device 2a-2c (page 22, line 20, et. seq.) and the liquid crystal display device 112 (page 25, line 21, et. seq.; Fig. 6) and includes a display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) provided at a position corresponding to the transparent display region (page 7, lines 11-12, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) with the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) being controlled to enter a shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6) under a predetermined condition, so as to shield display of the symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.) and transparently displayed on the transparent display region (page 7, lines 11-12, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1). The controller 140 (page 30, line 16, et. seq.; Fig. 10) is configured to:

- (a) determine the plurality of symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.);
- (b) determine a degree of shielding of display of the symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.) and transparently displayed on the transparent display region (page 7, lines 11-12, et.

seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1), in a case where arrangement of a predetermined symbol combination (page 8, lines 19-20, et. seq.) on the display device 2a-2c (page 22, line 20, et. seq.) is determined as a result of the process (a);

- (c) control the shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6) of the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) of the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6), in accordance with the degree of the shielding of the display of the symbols (page 10, line 4, et. seq.) with respect to the transparent display region (page 7, lines 11-12, et. seq.), the degree being determined in the process (b); and
- (d) arrange the symbols (page 10, line 4, et. seq.) determined in the process (a) on the display device 2a-2c (page 22, line 20, et. seq.).

Furthermore, the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) is made up of a normally white liquid crystal panel (page 45, line 11) for maintaining a transparent state (23a-23c) (page 10, lines 1-2, et. seq.; Fig. 4) with a voltage not being applied (page 145, lines 12-13) and the controller 140 (page 30, line 16, et. seq.; Fig. 10) controls the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) of the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) so as to change over from the transparent state (23a-23c) (page 10, lines 1-2, et. seq.; Fig. 4) to the shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6), by applying the voltage (page 45, lines 2-3) when process (c) is performed.

Claim 15 is directed to a gaming machine 1 (page 22, line 21, et. seq; Fig. 1) that includes a display device 2a-2c (page 22, line 20, et. seq.), a liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1), a liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) and a controller 140 (page 30, line 16, et. seq.; Fig. 10). The display device 2a-2c (page 22, line 20, et. seq.) has a plurality of symbols (page 10, line 4, et. seq.) arranged thereon in a plurality of columns. The liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) is disposed in front of the display device 2a-2c (page 22, line 20, et. seq.) and includes a plurality of transparent display regions (page 7, lines 11-12, et. seq.) for

transparently displaying the symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.). The liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) is disposed between the display device 2a-2c (page 22, line 20, et. seq.) and the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) and includes a plurality of display shielding units 113a-113c (page 7, line 14, et. seq.; Fig. 6) provided at positions corresponding to the transparent display regions (page 7, lines 11-12, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1) with the display shielding units 113a-113c (page 7, line 14, et. seq.; Fig. 6) being controlled to enter a shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6) under a predetermined condition so as to shield display of the symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.) and transparently displayed on the transparent display regions (page 7, lines 11-12, et. seq.) of the liquid crystal display device 16 (page 25, line 20, et. seq.; Fig. 1). The controller 140 (page 30, line 16, et. seq.; Fig. 10) is configured to:

- (a) determine the plurality of symbols (page 10, line 4, et. seq.) arranged on the display device 2a-2c (page 22, line 20, et. seq.);
- (b) control a respective one of the display shielding units 113a-113c (page 7, line 14, et. seq.; Fig. 6) of the liquid crystal display device 112 (page 25, line 21, et. seq.; Fig. 6) to enter the shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6), so as to:

sequentially arrange the plurality of symbols (page 10, line 4, et. seq.) in the plurality of columns on the display device 2a-2c (page 22, line 20, et. seq.), in accordance with a predetermined order stored in a memory, and

shield the display of the symbols (page 10, line 4, et. seq.) being arranged on the display device 2a-2c (page 22, line 20, et. seq.), in accordance with the predetermined order stored in the memory, in a case where arrangement of a predetermined symbol combination (page 8, lines 19-20, et. seq.) on the display device 2a-2c (page 22, line 20, et. seq.) is determined as a result of the process (a).

Furthermore, the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) is made up of a normally white liquid crystal panel (page 45, line

11) for maintaining a transparent state (23a-23c) (page 10, lines 1-2, et. seq.; Fig. 4) with a voltage not being applied (page 145, lines 12-13) and the controller 140 (page 30, line 16, et. seq.; Fig. 10) controls the display shielding unit 113a-113c (page 7, line 14, et. seq.; Fig. 6) of the liquid crystal shutter display device 112 (page 25, line 21, et. seq.; Fig. 6) so as to change over from the transparent state (23a-23c) (page 10, lines 1-2, et. seq.; Fig. 4) to the shielding state (113a-113c) (page 7, lines 22-24, et. seq.; Fig. 6), by applying the voltage (page 45, lines 2-3) when process (b) is performed.

Claim 18 is directed to a gaming machine 1 (page 22, line 21, et. seq; Fig. 1) that includes a rotary reel 2a-2c (page 22, line 20, et. seq.), a flat display device 16 (page 25, line 20, et. seq.; Fig. 1) and a controller 140 (page 30, line 16, et. seq.; Fig. 10). The rotary reel 2a-2c (page 22, line 20, et. seq.) has a plurality of symbols (page 10, line 4, et. seq.) arranged thereon. The flat display device 16 (page 25, line 20, et. seq.; Fig. 1) is disposed in front of the rotary reel 2a-2c (page 22, line 20, et. seq.) with the flat display device 16 (page 25, line 20, et. seq.; Fig. 1) transparently displaying the symbols (page 10, line 4, et. seq.) arranged on a surface of the rotary reel 2a-2c (page 22, line 20, et. seq.) and electrically displaying an image. The controller 140 (page 30, line 16, et. seq.; Fig. 10) performs a lottery for every game and displays a result of the lottery on the rotary reel 2a-2c (page 22, line 20, et. seq.) based upon the result of the lottery with the controller 140 (page 30, line 16, et. seq.; Fig. 10) awarding payout in accordance with the result of the lottery. Additionally, a normally white liquid crystal shutter display device (page 45, line 11) for maintaining a transparent state (23a-23c) (page 10, lines 1-2, et. seq.; Fig. 4) with a voltage being not applied (page 145, lines 12-13) is interposed between the rotary reel 2a-2c (page 22, line 20, et. seq.) and the flat display device 16 (page 25, line 20, et. seq.; Fig. 1) in order to appropriately shield transparent display of the symbols (page 10, line 4, et. seq.) arranged on the rotary reel 2a-2c (page 22, line 20, et. seq.).

#### VI. Grounds of Rejection to be Reviewed on Appeal

Claims 8, 9, 11-13 and 18 are rejected under 35 USC 103 (a) as being

unpatentable over Muir et al. (U.S. Patent Application Publication No. 2005/0192090) in view of Loose et al. (U.S. Patent No. 6,517,433) and further in view of Nishiyama et al. (U.S. Patent No. 6,507,385).

Claims 15 and 16 are rejected under 35 USC 103 (a) as being unpatentable over Muir in view of Loose further in view of Nishiyama as applied to claims 8, 9, 11-13 and 18 and further in view of Okada (U.S. Patent No. 4,573,681).

#### VII. ARGUMENTS

Claims 8, 9, 11-13 and 18 are rejected under 35 USC 103 (a) as being unpatentable over Muir et al. (U.S. Patent Application Publication No. 2005/0192090) in view of Loose et al. (U.S. Patent No. 6,517,433) and further in view of Nishiyama et al. (U.S. Patent No. 6,507,385)

The rejection is respectfully traversed.

Muir teaches a gaming machine display that includes a game playing arrangement mountable in a cabinet of a gaming machine. An electronically controlled display element overlies the game playing arrangement so that, depending on a state of the display element, the game playing arrangement is visible through the display element.

Loose teaches a spinning reel slot machine that includes a plurality of mechanical rotatable reels and a video display. In response to a wager, the reels are rotated and stopped to randomly place symbols on the reels in visual association with a display area. The video display provides a video image superimposed upon the reels. The video image may be interactive with the reels and include such graphics as payout values, a pay table, pay lines, bonus game features, special effects, thematic scenery and instructional information.

Nishiyama teaches a liquid crystal display element that includes a pair of substrates with transparent electrodes, a spacer for maintaining a certain gap between the substrates, which is disposed between the pair of substrates and a liquid crystal layer sealed between the substrates. The spacer has an elasticity. The sum of a repulsion force of the spacer and an internal pressure of the above-

mentioned liquid crystal layer is constantly approximately one atmosphere with a change in temperature within a range of usable temperatures of the liquid crystal display element. Each of the spacer 3 and the internal pressure of the liquid crystal layer varies linearly.

#### Claim 8

A gaming machine, comprises:

- (i) a display device on which a plurality of symbols are arranged;
- (ii) a liquid crystal display device disposed in front of the display device, including a transparent display region for transparently displaying the symbols arranged on the display device;
- (iii) a liquid crystal shutter display device disposed between the display device and the liquid crystal display device, including:

a display shielding unit provided at a position corresponding to the transparent display region of the liquid crystal display device, the display shielding unit being controlled to enter a shielding state under a predetermined condition, so as to shield display of the symbols arranged on the display device and transparently displayed on the transparent display region of the liquid crystal display device; and

- (iv) a controller, the controller being configured to:
- (a) determine the plurality of symbols arranged on the display device;
- (b) control the display shielding unit of the liquid crystal shutter display device to enter the shielding state so as to prevent the transparent display region of the liquid crystal display device from transparently displaying the plurality of symbols arranged on the display device, in a case where arrangement of a predetermined symbol combination on the display device is determined as a result of the process (a);
- (c) arrange the symbols determined in the process (a) on the display device; and
- (d) display a specific image on a display region of the liquid crystal display device including the transparent display region in which the display of symbols

arranged on the display device in the process (c) is shielded by the display shielding unit in the shielding state under the control in the process (b), wherein:

the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied; and

the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (b) is performed.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claim 8. Specifically, it is respectfully submitted that the applied art, alone or in combination, fails to teach or suggest that the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied and the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (b) is performed. Thus, it is respectfully submitted that one of ordinary skill in the art could not combine the features of the applied art to arrive at the claimed invention because the applied art is devoid of all the features of the claimed invention. As a result, it is respectfully submitted that claim 8 is allowable over the applied art.

#### Claim 11

A gaming machine comprises:

- (i) a display device on which a plurality of symbols are rearranged;
- (ii) a liquid crystal display device disposed in front of the display device, including a transparent display region for transparently displaying the symbols arranged on the display device;
- (iii) a liquid crystal shutter display device disposed between the display device and the liquid crystal display device, including:
- a display shielding unit provided at a position corresponding to the transparent display region of the liquid crystal display device, the display shielding

unit being controlled to enter a shielding state under a predetermined condition, so as to shield display of the symbols arranged on the display device and transparently displayed on the transparent display region of the liquid crystal display device; and

- (iv) a controller, the controller being configured to:
- (a) determine the plurality of symbols arranged on the display device;
- (b) determine a degree of shielding of display of the symbols arranged on the display device and transparently displayed on the transparent display region of the liquid crystal display device, in a case where arrangement of a predetermined symbol combination on the display device is determined as a result of the process (a);
- (c) control the shielding state of the display shielding unit of the liquid crystal shutter display device, in accordance with the degree of the shielding of the display of the symbols with respect to the transparent display region, the degree being determined in the process (b); and
- (d) arrange the symbols determined in the process (a) on the display device), wherein:

the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied; and

the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (c) is performed.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claim 11. Specifically, it is respectfully submitted that the applied art, alone or in combination, fails to teach or suggest that the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied and the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (c) is performed. Thus, it is respectfully submitted that one of ordinary skill in the art could not combine the features of the applied art to arrive at the claimed invention because the applied art

is devoid of all the features of the claimed invention. As a result, it is respectfully submitted that claim 11 is allowable over the applied art.

#### Claim 18

A gaming machine comprising:

- (i) a rotary reel on which a plurality of symbols are arranged;
- (ii) a flat display device disposed in front of the rotary reel, the flat display device for transparently displaying the symbols arranged on a surface of the rotary reel, the flat display device for electrically displaying an image; and
- (iii) a controller for performing a lottery for every game, the controller for displaying a result of the lottery on the rotary reel based upon the result of the lottery, the controller for awarding payout in accordance with the result of the lottery, wherein:

a normally white liquid crystal shutter display device for maintaining a transparent state with a voltage being not applied is interposed between the rotary reel and the flat display device in order to appropriately shield transparent display of the symbols arranged on the rotary reel.

It is respectfully submitted that none of the applied art, alone or in combination, teaches or suggests the features of claim 18. Specifically, it is respectfully submitted that the applied art, alone or in combination, fails to teach or suggest a normally white liquid crystal shutter display device for maintaining a transparent state with a voltage being not applied is interposed between the rotaryreel and the flat display device in order to appropriately shield transparent display of the symbols arranged on the rotary reel. Thus, it is respectfully submitted that one of ordinary skill in the art could not combine the features of the applied art to arrive at the claimed invention because the applied art is devoid of all the features of the claimed invention. As a result, it is respectfully submitted that claim 18 is allowable over the applied art.

### Results and Advantageous Effects of the Present Invention

Furthermore, it is respectfully submitted that the results and advantages are a part of the claimed invention as a whole. It is a basic tenet of patent law that the U.S. Patent and Trademark Office is not permitted to ignore the results and advantages produced by claimed subject matter, of which the prior art is devoid, simply because the claimed limitations are similar to that otherwise barren prior art. Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 7 USPQ2d 1315 (Fed. Cir. 1988); In re Chupp, 816 F.2d 643, 2 USPQ2d 1437 (Fed. Cir. 1987); Formson v. Advance Offset Plate, 755 F.2d 1549, 225 USPQ 26 (Fed. Cir. 1985).

In the prior art of the cited references, it is respectfully submitted that the prior art fails to employ a normally white liquid crystal shutter as a liquid crystal shutter in the game machine field. Therefore, Applicant respectfully asserts the fact that present invention pre-supposes that the normally white liquid crystal shutter display device is employed as a liquid crystal shutter provided between a transparent flat display, which provides an electronic display, and a reel, in the game machine field.

Further, Applicant respectfully asserts that the following advantageous effect is attained in order to overcome the rejection grounded under the provision of the "obviousness" clause. The present invention enables a transparent state to be maintained, even if no voltage is applied, by employing the normally white liquid crystal shutter. Alternatively, contrary to the normally white liquid crystal shutter, the normally black liquid crystal shutter enables a transparent state to be maintained only in the case where a voltage is applied.

Display state/type of liquid crystal	Normally white liquid crystal shutter (the present invention)	Normally black liquid crystal shutter
Reel shielding	ON state is established when a voltage is applied	OFF state is established if no voltage is applied
Transparent display of reel	OFF state is established if no voltage is applied	ON state is established when a voltage is applied

Therefore, the normally white liquid crystal shutter of the present invention is operative in such a manner that: a transparent state is changed to a shielding state by applying a voltage only when transparent reel display is shielded; and, no voltage

is applied when it is not shielded. On the other hand, in the case of the normally black liquid crystal shutter, when transparent reel display is shielded, application of a voltage is disabled, and the transparent state is controlled to be the shielding state. Alternatively, when it is not shielded, a voltage is continuously applied in order to maintain the transparent state.

The slot machine of the present invention enables reel symbols to be shielded according to a game state, by means of a liquid crystal shutter disposed between a flat display and a reel, so as not to be visually recognizable to players.

Further, the slot machine of the present invention is intended for use in the play of a game in such a manner that the reel symbols, which are arranged on the rear side, are visually recognizable to the players via the flat display disposed on the front side.

Therefore, if the liquid crystal shutter fails, for example, a game is not established unless the reel symbols are visually recognizable from the flat display disposed on the front side.

Alternatively, the normally black liquid crystal shutter has entailed a problem insofar that: if a failure occurs during employment of the same shutter, power is shutdown; the liquid crystal shutter is established in an OFF state in which no voltage is applied; and, the reel symbols are always shielded, disabling the play of a game.

In slot machines, a fatal defect could occur in a mode disabling reel symbols to be visually recognizable while in the play of games. The present invention has been made in order to solve the above-described problem, and is characterized by employing the normally white liquid crystal shutter for always transparently displaying reel symbols, even in the OFF state in which no voltage is applied owing to a failure exerted by employment of the liquid crystal shutter.

Claim 9 depends from claim 8 and includes all of the features of claim 8. Thus, it is respectfully submitted that the dependent claim is allowable at least for the reasons claim 8 is allowable as well as for the features it recites.

Claims 12 and 13 depend from claim 11 and includes all of the features of claim 11. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 11 is allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested.

Claims 15 and 16 are rejected under 35 USC 103 (a) as being unpatentable over Muir in view of Loose further in view of Nishiyama as applied to claims 8, 9, 11-13 and 18 and further in view of Okada (U.S. Patent No. 4,573,681)

The rejection is respectfully traversed.

Okada teaches a slot machine which has a winning probability table for storing a relation between a group and random numbers, the group being one of a plurality of groups made up by classifying prize-winning symbol combinations. The range of random numbers is properly fixed so that the winning probability is determined. Prior to the start of a game, one of the random numbers is sampled from a plurality of random numbers. The decisions on whether there is a win or not, and on which group the sampled random number belongs to if there is a win, are made with reference to the winning probability table. A hit request signal is generated for the latter decision. The hits are of different sizes, that is that different hits pay different numbers of wins. The larger the hit, the fewer random numbers correspond to it. The stopping series of symbols is controlled in accordance with the hit request signal.

#### Claim 15

A gaming machine comprises:

- (i) a display device on which a plurality of symbols are arranged in a plurality of columns;
- (ii) a liquid crystal display device disposed in front of the display device, including a plurality of transparent display regions for transparently displaying the symbols arranged on the display device:
  - (iii) a liquid crystal shutter display device disposed between the display device

and the liquid crystal display device, including:

a plurality of display shielding units provided at positions corresponding to the transparent display regions of the liquid crystal display device, the display shielding units being controlled to enter a shielding state under a predetermined condition, so as to shield display of the symbols arranged on the display device and transparently displayed on the transparent display regions of the liquid crystal display device; and

- (iv) a controller, the controller being configured to:
- (a) determine the plurality of symbols arranged on the display device;
- (b) control a respective one of the display shielding units of the liquid crystal display device to enter the shielding state, so as to:

sequentially arrange the plurality of symbols in the plurality of columns on the display device, in accordance with a predetermined order stored in a memory, and shield the display of the symbols being arranged on the display device, in accordance with the predetermined order stored in the memory.

in a case where arrangement of a predetermined symbol combination on the display device is determined as a result of the process (a), wherein:

the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied; and the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (b) is performed.

It is respectfully submitted that none on the applied art, alone or in combination, teaches or suggests the features of claim 15. Specifically, it is respectfully submitted that none on the applied art, alone or in combination, teaches or suggests the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied and the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (b) is performed. Thus, one of ordinary skill in the art would not be motivated to combine the features of the applied

art because such combination would not result in the claimed invention. As a result, it is respectfully submitted that claim 15 is allowable over the applied art.

Furthermore, like claims 8, 11 and 18, above, claim 15 also includes results and advantageous effects as discussed hereinabove.

Claim 16 depends from claim 15 and includes all of the features of claim 15. Thus, it is respectfully submitted that the dependent claim is allowable at least for the reasons claim 15 is allowable as well as for the features it recites.

Withdrawal of the rejection is respectfully requested.

#### VIII. CLAIMS

A copy of the claims involved in this appeal is attached hereto in the Claims Appendix.

#### IX. EVIDENCE

No evidence is being presented and therefore there is no Evidence Appenedix.

#### X. RELATED PROCEEDINGS

None.

## XI. CONCLUSION

It is respectfully submitted that the Examiner had failed to establish a *prima* facie case of obviousness for the reasons set forth above either under the TSM

(teaching suggestion motivation) test or the factual inquiries under Graham v. John <u>Deere Co.</u> It is respectfully requested the Board overturn the rejection and allow the pending claims.

Respectfully submitted,

Dated: November 16, 2010

By: <del>Schaukowi</del>tch Reg. No. 29,211

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Enclosure(s):

Notice of Appeal

Transmittal of Appeal Brief

Claims Appendix

Drawing Figures Appendix

Petition for Extension (three months)

DC412700.DQC

#### **CLAIMS APPENDIX**

#### Claims Involved in the Appeal of Application No. 10/697,237

- 1. 7. (Canceled)
- 8. (On Appeal) A gaming machine, comprising:
  - (i) a display device on which a plurality of symbols are arranged;
- (ii) a liquid crystal display device disposed in front of the display device, including a transparent display region for transparently displaying the symbols arranged on the display device;
- (iii) a liquid crystal shutter display device disposed between the display device and the liquid crystal display device, including:

a display shielding unit provided at a position corresponding to the transparent display region of the liquid crystal display device, the display shielding unit being controlled to enter a shielding state under a predetermined condition, so as to shield display of the symbols arranged on the display device and transparently displayed on the transparent display region of the liquid crystal display device; and

- (iv) a controller, the controller being configured to:
- (a) determine the plurality of symbols arranged on the display device;
- (b) control the display shielding unit of the liquid crystal shutter display device to enter the shielding state so as to prevent the transparent display region of the liquid crystal display device from transparently displaying the plurality of symbols arranged on the display device, in a case where arrangement of a predetermined symbol combination on the display device is determined as a result of the process (a);
- (c) arrange the symbols determined in the process (a) on the display device; and
- (d) display a specific image on a display region of the liquid crystal display device including the transparent display region in which the display of symbols arranged on the display device in the process (c) is shielded by the display shielding unit in the shielding state under the control in the process (b), wherein:

the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied; and

the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (b) is performed.

9. (On Appeal) The gaming machine according to Claim 8, wherein:

a special winning combination is not established by the predetermined symbol combination in the process (b).

#### 10. (Canceled)

- 11. (On Appeal) A gaming machine comprising:
  - (i) a display device on which a plurality of symbols are rearranged;
- (ii) a liquid crystal display device disposed in front of the display device, including a transparent display region for transparently displaying the symbols arranged on the display device;
- (iii) a liquid crystal shutter display device disposed between the display device and the liquid crystal display device, including:

a display shielding unit provided at a position corresponding to the transparent display region of the liquid crystal display device, the display shielding unit being controlled to enter a shielding state under a predetermined condition, so as to shield display of the symbols arranged on the display device and transparently displayed on the transparent display region of the liquid crystal display device; and

- (iv) a controller, the controller being configured to:
- (a) determine the plurality of symbols arranged on the display device:
- (b) determine a degree of shielding of display of the symbols arranged on the display device and transparently displayed on the transparent display region of the liquid crystal display device, in a case where arrangement of a predetermined

symbol combination on the display device is determined as a result of the process (a);

- (c) control the shielding state of the display shielding unit of the liquid crystal shutter display device, in accordance with the degree of the shielding of the display of the symbols with respect to the transparent display region, the degree being determined in the process (b); and
- (d) arrange the symbols determined in the process (a) on the display device), wherein:

the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied; and

the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (c) is performed.

12. (On Appeal) The gaming machine according to Claim 11, wherein: the controller is further configured to:

determine, in the process (b), the degree of the shielding of the display of the symbols arranged on the display device and transparently displayed on the transparent display region of the liquid crystal display device, in accordance with type of the predetermined symbol combination determined in the process (a), in a case where arrangement of the predetermined symbol combination on the display device is determined as a result of the process (a).

- 13. (On Appeal) The gaming machine according to Claim 11, wherein: a special winning combination is established by the predetermined symbol combination in the process (b).
- 14. (Canceled)
- 15. (On Appeal) A gaming machine comprising:

- (i) a display device on which a plurality of symbols are arranged in a plurality of columns;
- (ii) a liquid crystal display device disposed in front of the display device, including a plurality of transparent display regions for transparently displaying the symbols arranged on the display device;
- (iii) a liquid crystal shutter display device disposed between the display device and the liquid crystal display device, including:

a plurality of display shielding units provided at positions corresponding to the transparent display regions of the liquid crystal display device, the display shielding units being controlled to enter a shielding state under a predetermined condition, so as to shield display of the symbols arranged on the display device and transparently displayed on the transparent display regions of the liquid crystal display device; and

- (iv) a controller, the controller being configured to:
- (a) determine the plurality of symbols arranged on the display device;
- (b) control a respective one of the display shielding units of the liquid crystal display device to enter the shielding state, so as to:

sequentially arrange the plurality of symbols in the plurality of columns on the display device, in accordance with a predetermined order stored in a memory, and

shield the display of the symbols being arranged on the display device, in accordance with the predetermined order stored in the memory,

in a case where arrangement of a predetermined symbol combination on the display device is determined as a result of the process (a), wherein:

the liquid crystal shutter display device is made up of a normally white liquid crystal panel for maintaining a transparent state with a voltage not being applied; and

the controller controls the display shielding unit of the liquid crystal shutter display device so as to change over from the transparent state to the shielding state, by applying the voltage when process (b) is performed.

16. (On Appeal) The gaming machine according to Claim 15, wherein:

a special winning combination is established by the predetermined symbol combination in the process (b).

#### 17. (Canceled)

- 18. (On Appeal) A gaming machine comprising:
  - (i) a rotary reel on which a plurality of symbols are arranged;
- (ii) a flat display device disposed in front of the rotary reel, the flat display device for transparently displaying the symbols arranged on a surface of the rotary reel, the flat display device for electrically displaying an image; and
- (iii) a controller for performing a lottery for every game, the controller for displaying a result of the lottery on the rotary reel based upon the result of the lottery, the controller for awarding payout in accordance with the result of the lottery,

#### wherein:

a normally white liquid crystal shutter display device for maintaining a transparent state with a voltage being not applied is interposed between the rotary eel and the flat display device in order to appropriately shield transparent display of the symbols arranged on the rotary reel.

# <u>Drawing Figures Appendix</u> Selected Drawing Figures Involved in the Appeal of Application No. 10/697,237

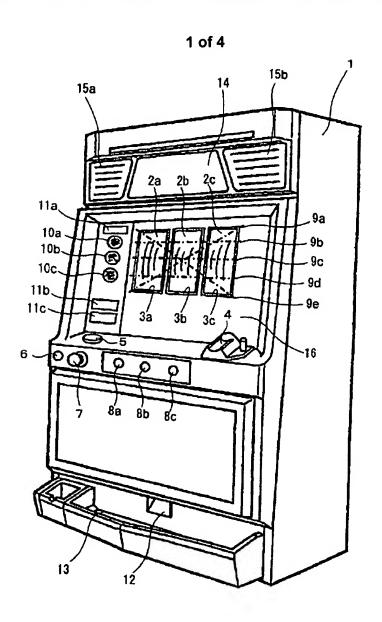


Fig. 1

## **Drawing Figures Appendix**

Selected Drawing Figures Involved in the Appeal of Application No. 10/697,237

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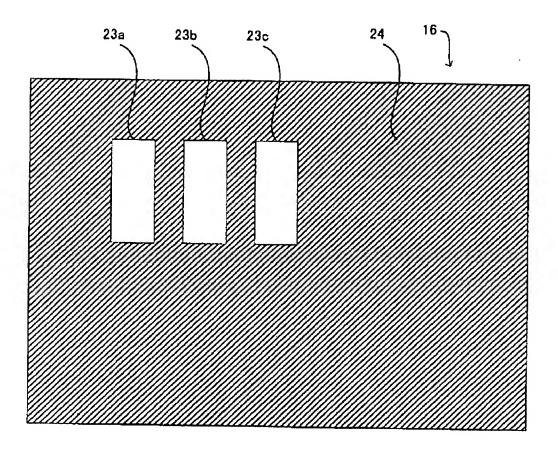


Fig. 4

# **Drawing Figures Appendix**

Selected Drawing Figures Involved in the Appeal of Application No. 10/697,237

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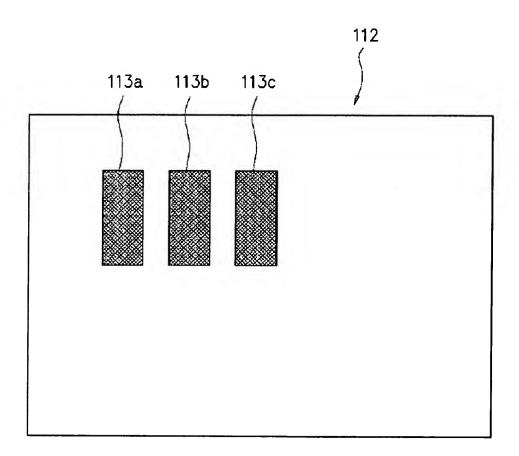


Fig. 6

## **Drawing Figures Appendix**

## Selected Drawing Figures Involved in the Appeal of Application No. 10/697,237

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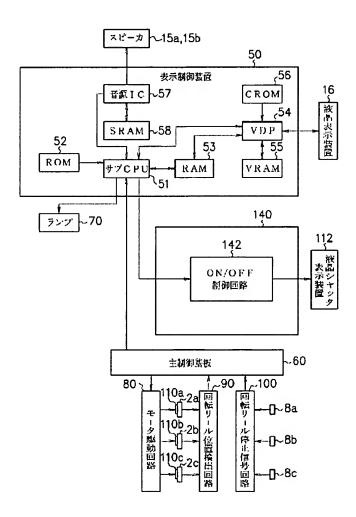


Fig. 10

# **Evidence Appendix**

(No evidence is being presented)

# **Related Proceedings Appendix**

(None)